

DEPARTMENT OF THE ARMY
Omaha District, Corps of Engineers
106 South 15th Street
Omaha, Nebraska 68102-1618

:NOTICE: Failure to acknowledge :	Solicitation No. DACW45 02 B 0007
:all amendments may cause rejec- :	
:tion of the bid. See FAR :	Date of Issue: 01 Mar 2002
:52.214-3 of Section 00100 :	Date of Opening: 20 May 2002

Amendment No. 0006
10 May 2002

SUBJECT: Amendment No. 0006 to Specifications and Drawings for Construction of
Wood River Flood Protection, Grand Island, NE
Solicitation No. DACW45 02 B 0007.

TO: Prospective Bidders and Others Concerned

1. The specifications and drawings for subject project are hereby modified as follows (revise all specification indices, attachment lists, and drawing indices accordingly).

a. Specifications. (Descriptive Changes.)

(1) Section 01330 page 4, paragraph 1.3.1, last line, after "G-A" add "(GA2 and G-A are synonymous)".

(2) Section 01330 page 7, paragraph 3.5.1.2, line 1, after "G-A" add "(GA2 and G-A are synonymous)".

(3) Section 02212 Page 2, delete paragraph 3 and substitute the following:

"3. COMPACTED EMBANKMENT MATERIALS: The embankment shall be constructed of earth material consisting of impervious and random fill, as per contract drawing details, that shall be obtained from required excavations within the project boundaries in accordance with Section 02210 GRADING and Section 02221 EXCAVATION, FILLING AND BACKFILLING FOR STRUCTURES. Earth used in construction of compacted embankment shall be free from unsuitable material."

(4) Section 02212 Page 2, paragraph 3.1, delete the entire paragraph and replace with the following:

"Materials having more than 25% passing U.S. Standard 200 mesh sieve shall be classified as impervious materials. Impervious material shall also be cohesive which include materials classifying as CL, CH, ML, SC and SM having a plasticity index of 9 or greater and falling between the 'U' and 'A' line on figure 3 in ASTM 2487-93 Standard tests for Classification of Soils for Engineering Purposes. Soils used for impervious material shall not have a plasticity index greater than 30. "

(5) Section 02212 Page 2, paragraph 3.3, line 1, delete "10 percent" and substitute "9 percent".

(6) Section 02212, add the attached cross sections showing typical levee section showing zoning of materials.

(7) Section 02231 Page 2, paragraph 1.4, under SD-18, for "Waybills and delivery Tickets" delete "GA2" and substitute "FIO".

- (8) Section 02245 Page 1, paragraph 1.4, under SD-09,
a) For "Initial Sampling and Testing" delete "FIO" and substitute "GA".
b) For "Field Gradation" delete "FIO" and substitute "GA".

(9) Section 02245 page 2, line 3, delete "Stone" and substitute "Riprap".

(10) Section 02245 Page 3, delete paragraph 2.1.1 and substitute the following:

"2.1.1 General Requirements

All material used for protection shall be durable quarried rock or crushed concrete as approved by the Contracting Officer's Representative. Individual pieces of riprap protection in-place shall be free from cracks, seams, and other defects that will cause rapid or excessive deterioration or degradation during service. The riprap protection shall not contain more than 5 percent of undesirable material by weight. Undesirable material is defined as individual pieces of stone or concrete which do not meet the quality requirements when tested as specified herein and which can be visually differentiated from the satisfactory pieces, plus dirt, sand, clay, and rock or concrete fines. Stone protection material shall not contain disintegrated granite or shale. If crushed concrete is to be used for riprap, initial sampling and testing shall be performed for each proposed concrete source in accordance with paragraphs 1.6.3, 1.6.3.1, 1.6.3.3, 1.6.3.3.1, 1.6.3.3.2, and 1.6.3.4. A source shall be defined as a unique demolition project name in which the concrete comes from a specific location and feature. The material being tested shall be subjected to one set of initial tests for each source and shall be of similar size variation of that specified herein. Initial test results shall be submitted to the Contracting Officer for approval 21 days prior to the material being delivered to the project. Crushed concrete used for riprap shall not contain reinforcing steel. Three Field Gradation production tests shall be performed on each type of riprap and bedding at the discretion of the Contracting Officer's Representative."

(11) Section 02245 Page 6, paragraph 3.3.3, 2nd sentence, delete "3 to 5 tons" and substitute "8 to 12 tons".

- (12) Section 02300 Page 9, paragraph ,
a) line 5, delete "unseated head of 54 feet and a seating head" and substitute "seated and unseated head"
b) line 7, delete "head of 20" and substitute "head of 17".

(13) Section 02457 Page 4, delete paragraphs 3.2.1 Pile Hammer and paragraph 3.2.2 Pile Protection and substitute the following new paragraphs:

"3.2.1 Driving Hammers

Hammers shall be steam, air, or diesel drop, single acting, double acting, differential-acting, or vibrating type. The driving energy of the hammers shall be as recommended by the manufacturer for the piling weights and subsurface materials to be encountered.

3.2.2 Pile Protection

A protecting cap shall be employed in driving when using impact hammers to prevent damage to the tops of pilings."

(14) Section 02500 Page 2, paragraph 4.2.1, add the following to the end of the paragraph:

"If crushed concrete is to be used for levee surfacing, initial sampling and testing shall be performed for each proposed concrete source. A source shall be defined as a unique demolition project name in which the concrete comes from a specific location and feature. The material being tested shall be subjected to one initial test for each source and shall be of similar size variation of that specified herein. Initial test results shall be submitted to the Contracting Officer for approval 21 days prior to the material being delivered to the project. "

(15) Section 02500 Page 2, delete paragraph 4.2.2 and substitute the following:

"4.2.2 "Control Tests

One Gradation Test shall be performed for each 4,000 tons of crushed rock delivered to the project. If crushed concrete is used, a Gradation Test and Wear Test shall be performed for each 2,500 tons delivered to the project. "

(16) Section 02935 Page 3, paragraph 2.1.1.2, add the following after the title:

"Seeding for this project shall include the following approximate acreages:

Riverside seeding: 250 acres
Dryland Type "A": 3 acres
Dryland Type "B": 75 acres "

b. Specifications (New and/or Revised and Reissued). Delete and substitute or add specification pages as noted below. The substituted pages are revised and reissued with this amendment.

<u>Pages Deleted</u>	<u>Pages Substituted or Added</u>
Submittal Registers Pages 1 thru 9 and Pages 1 and 2	Submittal Registers Pages 1 thru 6 and Pages 1 thru 3
Section 01040 As-Built Drawings	Section 01040 As-Built Drawings

c. Drawings (Not Reissued). The following drawing sheets is revised as indicated below with latest revision date of 10 May 2002. This drawing is not reissued with this amendment.

(1) Sheet G-37, see Notes, Note 6, delete "have a min thickness of 3/8-inch" and substitute "be type PZ22 or AZ13".

2. This amendment is a part of the bidding papers and its receipt shall be acknowledged on the Standard Form 1442. All other conditions and requirements of the specifications remain unchanged. If the bids have been mailed prior to receiving this amendment, you will notify the office where bids are opened, in the specified manner, immediately of its receipt and of any changes in your bid occasioned thereby.

a. Hand-Carried Bids shall be delivered to the U.S. Army Corps of Engineers, Omaha District, Contracting Division (Room 301), 106 South 15th Street, Omaha, Nebraska 68102-1618.

b. Mailed Bids shall be addressed as noted in Item 8 on Page 00010-1 of Standard Form 1442.

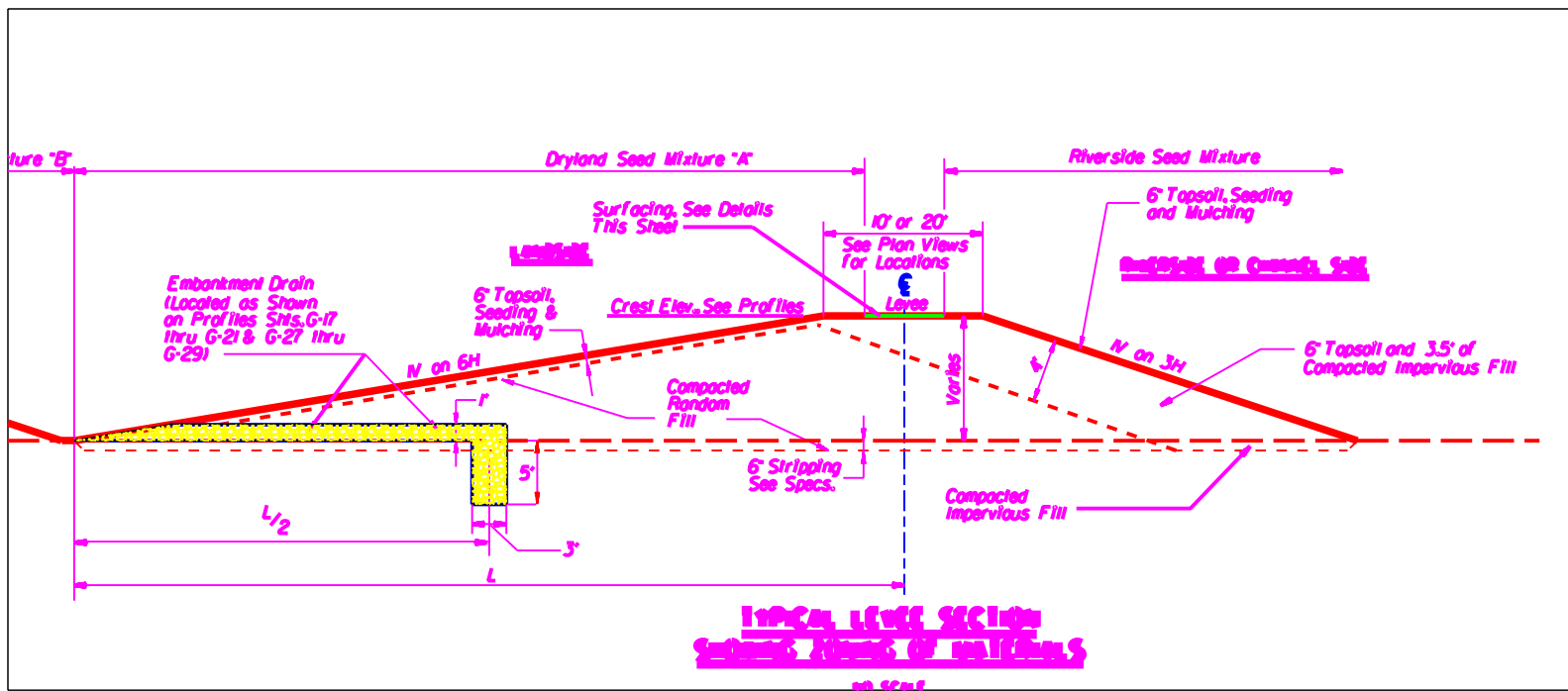
3. Bids will be received until 2:00 p.m., local time at place of bid opening, 20 May 2002.

Attachments:

Cross Section sheet listed in 1.a. above
Spec Pages listed in 1.b. above

U.S. Army Engineer District, Omaha
Corps of Engineers
106 South 15th Street
Omaha, Nebraska 68102-1618

10 May 2002 MFS/4411



SUBMITTAL REGISTER

SPECIFICATION SECTION

TITLE AND LOCATION

WOOD RIVER FLOOD CONTROL PROTECTION GRAND ISLAND, NE

CONTRACTOR

CONTRACT NUMBER

ACTIV- ITY No. a	TRANS- MITTAL No. b	ITEM No. c	SPECIFICATION PARAGRAPH NUMBER d	DESCRIPTION OF ITEM SUBMITTED e thru n	CLASSI- FICATION * o thru q	CONTRACTOR SCHEDULE DATES			CONTRACTOR ACTION			GOVERNMENT ACTION		REMARKS z
						SUBMIT r	APPROVAL NEEDED BY s	MATERIAL NEEDED BY t	CODE u	DATE v	SUBMIT TO GOVERN- MENT w	CODE x	DATE y	
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						SUBMIT r	APPROVAL NEEDED BY s	MATERIAL NEEDED BY t	CODE u	DATE v	SUBMIT TO GOVERN- MENT w	CODE x	DATE y	
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ENG FORM 4288-E, Mar 95 (Revised Sep 95)

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(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
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(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
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CONTRACT NO.

Wood River Flood Control, Grand Island, NE

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APPROVING AUTHORITY

[illegible]

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SECTION 01040

AS-BUILT DRAWINGS
5/00 (Rev June 2001)

PART 1 GENERAL

1.1 DEFINITIONS

The definitions listed below form a part of this specification.

1.1.1 Red-Line Drawings

Contract drawings marked-up to show actual work performed to include necessary sketches, modification drawings, shop drawings and notes. Green ink is used to indicate work deleted from the contract. Red ink is used for additions and deviations from the contract. Red-Line Drawings shall reflect as-built conditions, revisions shown on the drawings and noted on the title block.

1.1.2 As-Built Drawings

Professional finished electronic CADD files developed from the original contract drawings that include all of the information from the Red-Line Drawings and suitable for half-size reproduction.

1.1.3 Final Shop Drawings

Shop drawings utilized by the Contractor that reflect the final, as-built condition of the required system or structure with all changes fully incorporated. Final Shop Drawings also include initial, intermediate, and final topographic surveys or cross-sections of the constructed works whether to calculate quantities or otherwise. These drawings are expected to be in the form of electronic CADD files.

1.1.4 Vellum Drawings

Drawings on erasable Vellum 20# similar or equal to Xerox Zero solvent vellum.

1.1.5 Black-Line Drawings

Paper drawings reproduced from vellum drawings and suitable for microfilming.

1.1.6 Full-Size Drawings

28 inches x 40 inches nominal size drawings with all details visually readable.

1.1.7 Half-Size Drawings

14 inches x 20 inches nominal size drawings with all details visually readable.

1.1.8 Modification Circle

A circle with a horizontal line through the center. The top half will contain the letter "P" with the bottom half containing the Modification number. The lettering standard will be 120/6 WRICO or similar.

1.1.9 Mylar Drawings

Drawings on polyester film, 3 or 5 mil, similar or equal to K & E Stabilene.

1.1.10 Electronic CADD Files

Electronic CADD files are files saved on CD-ROM in accordance with appropriate CADD standard. The CADD standard will include level on/off status, special characters, line weights, font, and size requirements.

1.2 GENERAL REQUIREMENTS

The work includes creation of two separate sets of red-lined, full scale as-built drawings marked-up to fully indicate as-built conditions. In addition to the marked-up contract drawings, these Red-Line drawings shall include the Final Shop Drawings of all systems designed or enhanced by the Contractor, and cross-sections at specified intervals, topographic surveys of excavation, final grade and other intermediate surveys used to calculate quantities. The Contractor shall submit a full-size Red-Line drawing and either an electronic CADD file on AutoCAD R14 or Microstation SE (or higher) to accurately depict existing conditions of the project, or a manually complete set of shop drawings. The Contractor shall be responsible for development of electronic CADD files in accordance with Omaha District CADD standards. Omaha District's CADD standards are located on the Omaha District's FTP site (<ftp://ftp.nwo.usace.army.mil/pub/ED/CADD/ae/standards/ACADstd.pdf>) for AutoCAD and (<ftp://ftp.nwo.usace.army.mil/pub/ED/CADD/ae/standards/Caddstd.PDF>) for Microstation. The Red-Line Drawings shall include all major features of the work and all details to the same level as the original contract set of drawings. All changes from the contract drawings shall be included in the Red-Line Drawings, including but not limited to all deviations, additional information, and modifications to the contract. Where contract drawings or specifications allow for options, only the option selected and actually constructed shall be shown on the Red-Line Drawings. Systems designed or enhanced by the Contractor such as HVAC control system, fire alarm system fire sprinkler system, irrigation sprinkler system, letters of clarification, shall be accurately and neatly recorded on the Red-Line Drawings using the same symbols, terminology, and general quality as the original set of contract drawings. All sheets affected by a change shall be revised. The transmittal requirements for the As-Built Drawings shall be shown as events on the Contractor prepared progress chart or network analysis system (NAS), whichever is applicable. The approved Red-Line Drawings together with the Final Shop Drawings will be utilized by the Government in creation of the As-Built Drawings. The As-Built Drawings will become the permanent record drawings of construction.

1.3 PAYMENT

In accordance with the clause "Payment Under Fixed - Price Construction Contracts", which provides for progress payments on estimates of work accomplished (which meets the standards of quality established under the contract), \$100,000 will be withheld from payment for the creation of Red-Line Drawings until the Electronic CADD Files, Red-Line Drawings, and

Final Shop Drawings are delivered to the Contracting Officer (including any necessary revisions and subject to the approval of the Contracting Officer).

1.4 TRANSMITTAL OF AS-BUILT DRAWINGS

1.4.1 As-Built Drawings

The Government will produce As-Built Drawings from the Red-Line Drawings and Final Shop Drawings. The Red-Line Drawings shall include all changes. The Red-Line Drawings shall be submitted to the COR and Omaha District Office (CENWO-ED-DI) no earlier than the day of acceptance of the project and no later than thirty (30) days after the date on the acceptance letter for the Preliminary Drawing unless otherwise directed by the COR. (Note: Red-Line Drawings should not be forwarded to the customer. Corps of Engineers, Omaha District COR, will forward As-Built Drawings to the customer after Quality Review.) The Contractor shall submit to the COR: the 2 sets of Red-Line Drawings, and if electronic shop drawings are part of the Red-Line Drawings as in para. 1.2, 2 sets of CADD files on CD (folder name containing as-built files shall be designated "AS-BUILTS" on each CD-ROM with Contract No.). The COR shall send Omaha District Office (ATTN: CENWO-ED-DI, Jim Janicek) the following documents: 1 set one Red-Line Drawings and 1 set of CADD files on a CD. The Contractor shall ensure that both CD case and CD contain the name of the project, location, specification number, and contract number, and words "As-Built Record Set"). The folder shall contain drawings, indexes and X-REF files related to all As-Built Drawings.

1.5 PROCEDURE

Within 30 days after Notice to Proceed, the Government will furnish the Contractor: (1) one full-size set of contract drawings on bond paper and (2) one CD containing the contract drawings and CADD standards in Microstation SE and Acrobat (pdf) format for use in plotting and in the preparation of Red-Line Drawings by the Contractor. The CD will be forwarded to the Resident Engineer. This CD will then be furnished to the Contractor after signed receipt to the Resident Engineer. The Contractor shall create 2 sets of full-size Red-Line Drawings to fully indicate As-Built conditions. The Red-Line Drawings shall be maintained at the site, in a current condition until the completion of the work and shall be available for review by the COR at all times. All as-built conditions shall be on the Red-Line Drawings within two (2) days after the work activity is completed or shall be entered on the deficiency tracking system (see Section 01451, CONTRACTOR QUALITY CONTROL).

1.6 TITLE BLOCKS

The contract number and the specification number (if available) shall be shown on all sheets. "RECORD DRAWING" shall be added below the title block on all sheets. All modifications to the contract shall be posted in ascending order. The top line of the revision box shall state "REVISED TO SHOW AS-BUILT CONDITIONS" and dated. All modifications to all plans, sections, or details, shall have a modification number placed in the revision box under column entitled "Symbol". The statement "GENERAL REVISIONS" may be used when applicable. The date to be added in the revision box for modifications is found in Block 3 of Form SF-30. Cover Sheet will have Contract Award Set changed to As-Built Record Set with month & year completed. Month and year completed will also go in the date box in the title block. There will be no separate dates.

1.7 PROCEDURES FOR POSTING MODIFICATION CHANGES TO DRAWINGS

Follow directions in the modification for posting descriptive changes.

A Modification Circle shall be placed at the location of each deletion.

The highest modification number on the sheet should be shown in the modification circle in the "DATE" and "DRAWING CODE" boxes of the title block.

For all new details or sections that are added to a drawing, place a Modification Circle by the detail or section title.

For changes to a drawing, place a Modification Circle by the title of the affected plan, section or detail titles (each location).

For changes to schedules on drawings, a Modification Circle shall be placed either by the schedule heading or by the change in the schedule.

The Modification Circle size shall be 1/2-inch diameter unless the area where circle is to be placed is crowded. Use smaller size circle for crowded areas.

1.8 WORD ABBREVIATIONS

Abbreviations shown on the abbreviation sheet shall be used to describe all work items. Additional word abbreviations, not found on the abbreviation sheet but necessary to describe the work, shall be properly identified and incorporated with the other standard word abbreviations.

1.9 LEGEND SHEETS

Symbols, which conflict with those on the original contract legend sheet, shall not be used. Additional symbols, properly identified, necessary to depict any additional work items, shall be added to the legend sheet or supplemental legend. Those projects that do not have legend sheets may use supplemental legends on each sheet where symbol is shown.

1.10 CONTRACTOR SHOP DRAWINGS

Contractor shop drawings, which supersede data on the contract plans and/or additional drawings, prepared by the Contractor, shall be incorporated into the As-Built Drawings. Design plans prepared by Contractor shall include the designer's name on the As-Built Drawings.

1.11 INDEXING OF DRAWINGS

If drawings are added to the portfolio of drawings to depict as-built conditions, the index of drawings shall be revised accordingly.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.1 GENERAL

As-Built Drawings shall include as-built information to the same level of detail as shown on the original details, unless otherwise specified. The Contractor shall provide any additional full-size drawings as required to

display all the details.

3.2 SITE WORK

3.2.1 Utilities

All utilities shall be shown whether active, inactive, shown on the original contract drawings, or found on-site. The type of utility, location, general direction, size, material make-up and depth shall be shown. The location and description of any utility line or other installations of any kind known to exist within the construction area shall be shown. The location shall include dimensions to permanent features.

3.2.2 Structures

Structures above and below ground shall be shown. The size, material make-up, location, height, and/or depth shall be shown. Manholes shall show rim elevation and invert elevations as applicable. Power poles shall show electrical equipment and voltage rating.

3.2.3 Grades

Grade or alignment of roads, structures, or utilities shall be corrected if any changes were made from the contract drawings. Elevations shall be corrected if changes were made in site grading.

3.3 STRUCTURAL

3.3.1 Steel

Shop drawings that deviate from the contract drawings shall be incorporated in the Red-Line Drawings.

3.4 ELECTRICAL

3.4.1 PANELS

All contract drawing panel schedules shall be revised to show as-built conditions. Home-run circuit designation on electrical drawings shall accurately correspond to the as-built panel schedules.

3.4.2 Controls

All control diagrams in contract drawings shall be revised to reflect as-built conditions, and setpoints.

-- End of Section --